

Please add claims 21-25 as follows:

~~21~~ 21. A method of reducing a blocking artifact appearing when coding a moving picture, comprising:

selecting a plurality of pixels;

obtaining frequency information for each of the plurality of pixels;

5 adjusting a discontinuous component in a frequency domain of a first pixel of the plurality of pixels based on a corresponding component in the frequency domain of a second pixel of the plurality of pixels; and

applying the adjusting operation to a spatial domain of the first pixel to

C/10n reduce a blocking artifact. ~~21~~

~~22~~ 22. The method according to claim 21, wherein a magnitude of the discontinuous component in the first pixel is adjusted to a magnitude of the corresponding component in the second pixel, wherein the magnitude of the corresponding component in the second pixel is based on a smallest value of
5 corresponding component magnitudes in remaining pixels of the plurality of pixels. *u*

23. The method according to claim 22, wherein the adjusting step satisfies at least one of the following conditions:

$$v_3' = v_3 - d; \text{ and}$$

$$v_4' = v_4 + d; \text{ where } d = \text{CLIP} (c_2(a_{3,0}' - a_{3,0})/c_3, 0, (v_3 - v_4)/2) * \delta(|a_{3,0}|/QP),$$

$$a_{3,0}' = \text{SIGN}(a_{3,0}) * \text{MIN}(|a_{3,0}|, |a_{3,1}|, |a_{3,2}|), \text{ wherein } v_3 -$$

v_4 are initial pixel values, $v_3' - v_4'$ are adjusted pixel values, $a_{3,0} - a_{3,2}$ are the discontinuous component of the discrete cosine transform coefficients of the first and second pixels, c_2 and c_3 are DCT kernel coefficients and QP is a quantization parameter of a macroblock containing v_4 .

24. The method according to claim 21, further comprising:

determining a smoothness level of the plurality of pixels; and

selecting one of a first and a second mode based on the smoothness level,

wherein the blocking artifact is reduced based on the selected mode, wherein the second

mode is selected when the following condition is satisfied: $(v_0 == v_1 \& \& v_1 == v_2 \& \& v_2 == v_3 \& \& v_4 == v_5 \& \& v_5 == v_6 \& \& v_6 == v_7)$, wherein $v_0 - v_7$ are pixel values.

25. The method according to claim 24, wherein the adjusting step in the second mode satisfies at least one of the following conditions:

$$v_3' = v_3 - d_1;$$

$$v_4' = v_4 + d_1;$$

$$v_2' = v_2 - d_2;$$

$$v_5' = v_5 + d_2;$$

$$v_1' = v_1 - d_3; \text{ and}$$

$$v_6' = v_6 + d_3,$$

where

$$d_1 = (3(v_3 - v_4) // 8) * \delta(|a_{3,0}| \langle QP),$$

$$d_2 = (3(v_3 - v_4) // 16) * \delta(|a_{3,0}| \langle QP), \text{ and}$$

$$d_3 = (3(v_3 - v_4) // 32) * \delta(|a_{3,0}| \langle QP),$$

wherein $v_0 - v_7$ are initial pixel values, $v_1' - v_6'$ are adjusted pixel values, $a_{3,0}$ is the discontinuous component of the discrete cosine transform coefficients of the first pixel and QP is a quantization parameter of a macroblock containing v_4 .